



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/779,880	02/18/2004	Haruki Yoshida	Q79957	9500
23373	7590	09/09/2005		
SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037			EXAMINER LE, THANH TAM T	
			ART UNIT	PAPER NUMBER
			2839	

DATE MAILED: 09/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/779,880

Applicant(s)

YOSHIDA ET AL.

Examiner

Thanh-Tam T. Le

Art Unit

2839

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 25 August 2005.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,4-9,12 and 13 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1,4-9,12 and 13 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

### DETAILED ACTION

1. The RCE that filed on 8/25/05 is acknowledged.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1, 4-6, 8 and 12-13 are rejected under 35 U.S.C. 102(e) as being anticipated by Sato et al. (6,547,608, figure 8D).

Regarding claim 1, Sato et al., figure 8D, disclose a female terminal comprising:

- a terminal-inserting portion having a bottom wall (8D) and a resilient contact piece portion (3D) extending rearwardly from a front end edge (11D) of the bottom wall to a free end portion (12D); and
- a convex portion projecting toward the bottom wall is formed at the free end portion, when the resilient contact piece portion is resiliently deformed upon insertion of a male terminal (not shown), the convex portion is brought into contact with the bottom wall;

wherein the resilient contact piece portion including a first curved portion (AD1) by which the male terminal is clamped; and

wherein the resilient contact piece portion including an intermediate portion (DD) provided substantially in parallel to the bottom wall at a predetermined clearance so that the resilient contact piece portion extending parallel to an insertion direction of the male terminal except the first curved portion.

Regarding claim 4, figure 8D, a second curved portion (BD) on a top wall (7D) of the terminal-inserting portion.

Regarding claim 5, the first and second curved portions are opposed to each other.

Regarding claim 6, the resilient contact piece portion extending almost parallel to the bottom wall except the first curved portion to form the clearance between the contact piece and the bottom wall.

Regarding claim 8, the convex portion having a semi-arc shape in cross-section.

Regarding claim 12, the first curved portion and the convex portion are spaced apart from each other by a predetermined distance.

Regarding claim 13, two end support points of the resilient contact piece portion are formed so that a distance between the two end support points is kept constant upon insertion of the male terminal.

4. Claims 1 and 9 are rejected under 35 U.S.C. 102(e) as being anticipated by Shimizu (6,761,597).

Regarding claim 1, Shimizu, figure 2, disclose a female terminal comprising:

- a terminal-inserting portion having a bottom wall (2) and a resilient contact piece portion (14) extending rearwardly from a front end edge (13) of the bottom wall to a free end portion (14f); and
- a convex portion projecting toward the bottom wall is formed at the free end portion, when the resilient contact piece portion is resiliently deformed upon insertion of a male terminal (not shown), the convex portion is brought into contact with the bottom wall;

wherein the resilient contact piece portion including a first curved portion (not labeled) by which the male terminal is clamped; and

wherein the resilient contact piece portion including an intermediate portion (14e) provided substantially in parallel to the bottom wall at a predetermined clearance so that the resilient contact piece portion extending parallel to an insertion direction of the male terminal except the first curved portion.

Regarding claim 9, the convex portion is spaced from the bottom wall when the male terminal has not been inserted (figure 2, column 2, lines 66-67 and column 3, lines 1-5).

### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sato et al. (6,547,608 in figure 8D) in view of Sato et al. (6,547,608 in figure 6).

Sato et al., figure 8D, disclose the instant claimed invention as described above except for a third curved portion is formed on the bottom wall at a position corresponding to a first curved portion.

Sato et al., figure 6, disclose a female terminal having a contact (B10) which read on a third curved portion corresponding to a first curved portion (140). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sato et al., figure 8D to have the third curved portion, as taught by Sato et al., figure 6, in order to have more flexibility.

### ***Response to Arguments***

7. Applicant's arguments with respect to claim 1 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thanh-Tam T. Le whose telephone number is 571-272-2094. The examiner can normally be reached on 7:30-5:00.

9. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, TC Patel can be reached on 571-272-2098. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

10. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'TL', with a long horizontal line extending to the right.

Thanh-Tam T. Le  
Primary Examiner  
Art Unit 2839

TL  
09/06/05.